NAEP and the Progress of Education in America

Achievement Gaps

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NAEP 40 NAGB 20

1988-2008

- NAEP has become the most useful and credible assessment for *Informing*, but less useful for *Reforming*.

2008-2018

- NAGB may be compelled to reconsider its potential role in closing achievement gaps.
Benefits of Using NAEP for Informing about Achievement Gaps

• For measuring achievement gaps, no other assessment has had more frequency and consistency than NAEP

  – NAEP has collected data continuously for over three decades.
  – NAEP tests a wide range of subjects (the arts, civics, economics, geography, history, math, reading, science, writing).
  – NAEP is the only national representative assessment that measures student achievement across racial/ethnic and class groups throughout the nation.
  – NAEP measures achievement at more grades (4th, 8th, 12th), and ages (9, 13 and 17), which are critical points in the educational progress of students.
  – NAEP provides larger samples.
# Introduction of NAEP Subject Areas from 1969 to 2007

<table>
<thead>
<tr>
<th>YEAR</th>
<th>NATIONAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1969–70</td>
<td>science writing</td>
</tr>
<tr>
<td>1970–71</td>
<td>reading</td>
</tr>
<tr>
<td>1971–72</td>
<td>music</td>
</tr>
<tr>
<td>1972–73</td>
<td>mathematics</td>
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<tr>
<td>1974–75</td>
<td>art</td>
</tr>
<tr>
<td>1986</td>
<td>U.S. history</td>
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<tr>
<td>1988</td>
<td>civics</td>
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<tr>
<td></td>
<td>geography</td>
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<tr>
<td>1997</td>
<td>arts</td>
</tr>
<tr>
<td>2006</td>
<td>economics</td>
</tr>
</tbody>
</table>

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics
African Americans and Hispanics Trail Whites in Reading

![Graph showing the reading performance of White, Black, and Hispanic populations over time, with a decline trend.](graph.png)
African Americans and Hispanics Trail Whites in Mathematics

White -9
Black-9
Hispanic - 9
White-13
Black-13
Hispanic -13
White -17
Black -17
Hispanic -17
Black and Hispanic 17 year-old students are achieving at the level of White 13 year-old students.

Limitations of NAEP for Measuring Achievement Gaps

- More knowledge about schools and individuals would allow us to identify factors that are associated with low performance
  - Anonymity of schools
  - No single student taking the whole test is problematic
NAEP 2007 Grade 8 Math Assessment: Average within-school Scale Scores for Black and White Students in Public Schools, by Percent Black in School
NAEP 2007 Grade 8 Math Assessment: Average within-school Scale Scores for Hispanic and White Students in Public Schools, by Percent Hispanic in School
NAEP 2007 Grade 8 Math Assessment: Average within-school Scale Scores for Students Eligible for Free/Reduced-Price Lunch vs Students Not Eligible in Public Schools with <=25%, 26-75%, and >75% of Students Eligible

Mean School Score of Students Eligible for Free/Reduced-Price Lunch

Mean School Score of Students Not Eligible

Eligible National Student Mean

Non-Elig National Student Mean

Tier 1 <= 25% Eligible
Tier 2 between 26% & 75% Eligible
Tier 3 > 75% Eligible
NAEP 2007 Grade 8 Reading Assessment: Average within-school Scale Scores for Black and White Students in Public Schools, by Percent Black in School
NAEP 2007 Grade 8 Reading Assessment: Average within-school Scale Scores for Hispanic and White Students in Public Schools, by Percent Hispanic in School
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Non-Elig National Student Mean

Eligible National Student Mean
Recommendations Moving Forward

• Either move to or invent a parallel system that permits more people to conduct analyses of:
  – Scores at school and individual levels
  – Relationships between scores and other behavioral and environmental variables to inform actions to improve student performance
• Supplement NAEP data with data from other sources.
• Continue expanding/enriching background data collected on NAEP students.
Background Data Collected by NAEP

- Questionnaires on:
  - Student demographics, classroom experiences, and educational support (completed by students)
  - Teacher background, training, and instructional practices (completed by teachers at grades 4 and 8; usually not at grade 12)
  - School policies and characteristics (completed by school principal or assistant principal)
  - Students with disabilities or English-Language Learners (completed by special education teacher, bilingual/ESL teacher, or staff member most familiar with student)
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